

We Claim:

1           1.       An arc chamber of an ion implanter system comprising:  
2           an arc chamber enclosure for an electron emissive source, said source extending  
3           into said arc chamber enclosure through a wall of said arc chamber enclosure, said wall  
4           through which said source extends comprising an insulator material surrounding said  
5           source.

1           2.       The arc chamber of Claim 1 wherein said insulator material is a high  
2           temperature ceramic material.

1           3.       The arc chamber of Claim 2 wherein said insulator material is  
2           selected from the group consisting of alumina and boron nitride.

1           4.       The arc chamber of Claim 3 wherein said insulator material is boron  
2           nitride.

1           5.       The arc chamber of Claim 1 wherein a substantial portion of said wall  
2           through which said source extends into the arc chamber comprises an insulator material.